

REMARKS

Status of Claims

Claims 1-5 and 7 are pending in the application. Claim 6 has been canceled, and the subject matter has been incorporated into amended claim 1.

Premature Finality of Office Action

Applicants first wish to point out that the Information Disclosure Statement filed May 27, 2009 was *not* submitted with a fee under 37 C.F.R. § 1.117(p) but was instead filed with a statement under 37 C.F.R. § 1.97(e). Accordingly, pursuant to M.P.E.P. § 609.04(b), since the reference cited in the Disclosure Statement prompted the new grounds of rejection, the next Office Action should not be made final because it is clear that the Applicant has submitted the information to the Office promptly after being made aware of its existence. Therefore, the finality of the Office Action is premature, and reconsideration and withdrawal of the finality of the Office Action are respectfully requested.

Obviousness Rejection

The rejection of claim 6 under 35 U.S.C. § 103(a) over Hayakawa, U.S. 5,421,877 has been rendered moot in light of the cancellation of the involved claim.

The rejection of claims 1-3, 5 and 7 under 35 U.S.C. § 103(a) over Hayakawa, and the rejection of claim 4 under 35 U.S.C. § 103(a) over the combined disclosures of Hayakawa and Ubuichi et al., JP 11-228177 are each respectfully traversed.

The present invention is directed to an automotive window glass having a ceramic color layer formed thereon, the automotive window glass being characterized in that a ceramic color layer is formed by using a ceramic color paste containing a green-color pigment in an amount of 60-80wt% relative to 100wt% of the total of the black-color pigment and the green-color pigment.

Additionally, in a $L^*a^*b^*$ color system, a transmitted color of the glass has a value of a^* of -10.0 to 0.0 , and a reflected color of the ceramic color layer, which is observed from a vehicle exterior side through the glass has $L^* \leq 30.0$, $-10.0 \leq a^* \leq 0$, and $-2 \leq b^* \leq 8$, wherein the visible light transmittance of the ceramic layer is 0.3% or lower and the ultraviolet light transmittance of the ceramic layer is 0.1% or lower.

As pointed out in Table 1 of the specification and Examples 1-5, the inventors have surprisingly found that a ceramic color layer having a preferable color tone (i.e. "black green" or "deep green") for an automotive window glass is obtained while maintaining visible light transmittance and ultraviolet transmittance at 0.0% . The specification explains that the presently claimed color layer functions to conceal heat ray terminals, trim members and the like from a vehicle exterior, and because the inclusion of a green pigment would lower black pigment content which could adversely affect the concealing function, a person of ordinary skill in the art would not think to use a mixture containing such a large concentration of green pigment. (See paragraphs [0003] and [0006]). The inventors have unexpectedly found that even using a concentration as high as $80\text{wt}\%$ of green pigment leads to the same 0.0% light transmittance as obtained when using a $100\text{wt}\%$ black-color pigment.

In contrast to the presently claimed invention, Hayakawa does not disclose an automobile glass with any color tone other than black or gray. (See Table 1 of Hayakawa). Automotive window glass with a black or gray tone is not desirable because it results in an uncomfortable feeling. (see paragraph [0006] of the specification). Additionally, Hayakawa does not suggest using a high concentration of green-pigment to create an automotive glass with a desirable color tone. One of ordinary skill in the art would not have any motivation to attempt to make a ceramic color layer with as high a concentration of green-color pigment as presently claimed.

Furthermore, the inventors have unexpectedly discovered that the color tones of Examples 1-5 ("black green" and "deep green" as in Table 1) result in

superior color tones for automotive window glass. In terms of a reflected color of the ceramic color layer, which is observed from a vehicle exterior side through the glass in a $L^*a^*b^*$ color system, claim 1 defines the resulting value ranges of a^* ($-10.0 \leq a^* \leq 0$) and b^* ($-2 \leq b^* \leq 8$). The a^* value of Comparative Example 1 is 0.5, which clearly falls outside of the claimed range, and the b^* value of Comparative Example 2 is -2.81, which also clearly falls outside of the claimed range. The color tones disclosed in Hayakawa correspond to the color tones of Comparative Example 1 (black color), which indicates that the reference is clearly excluded from the claimed invention. Therefore, the claimed invention is not obtainable through routine experimentation based on Hayakawa.

Moreover, according to newly amended claim 1, the green-color pigment is in 60-80wt%, relative to 100wt% of the total of the black and green color pigments. Therefore, the black-color pigment is only at a concentration of 20-40wt%. In other words, the green-color pigment is the major pigment, and the black-color pigment is the minor pigment. The inventors have unexpectedly discovered that even though the green-color pigment was used as a major pigment in Example 2 (40wt% black and 60wt% green) to Example 5 (20wt% black and 80wt% green) of the specification, the resulting visible light transmittance and ultraviolet transmittance was still 0.0%. This is in stark contrast with the inferior ceramic color layer of Comparative Example 3 (100wt% green), which has a visible light transmittance of 1.5% and a ultraviolet transmittance of 0.1%. A person of ordinary skill in the art, looking at Hayakawa for guidance, would have no motivation to use a green-color pigment as a major pigment in the ceramic color layer, especially to use a concentration of 80wt% green-color pigment.

Finally, the rejection against claim 4 should be withdrawn. For the reasons set forth above, claim 1 should be allowable and therefore claim 4 should also be allowable since it is dependent from claim 1.

For the foregoing reasons, reconsideration and withdrawal of the rejection of claims 1-5 and 7 over Hayakawa is therefore respectfully requested.

Summary and Conclusion

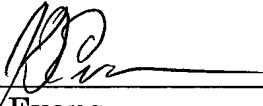
In view of the foregoing, the application is respectfully submitted to be in condition for allowance, and favorable action thereon is earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned at (202) 624-2845 would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323, Docket No. 038788.57892US.

Respectfully submitted,

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